

PATENT ABSTRACTS OF JAPAN

(11) Publication number : 10-060480
 (43) Date of publication of application : 03.03.1998

(51) Int. Cl. C11D 3/37
 C11D 10/02
 C11D 17/08
 //C11D 10/02
 C11D 1:72
 C11D 1:722
 C11D 3:37
 C11D 3:20)

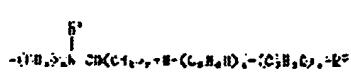
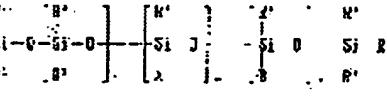
(21) Application number : 08-218855 (71) Applicant : KAO CORP
 (22) Date of filing : 20.08.1996 (72) Inventor : YAMADA ISAO
 SHIGEMATSU KUNIYOSHI
 TERANISHI FUTOSHI

(54) LIQUID DETERGENT COMPOSITION

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a liquid detergent composition, having the moderate detergency for the so-called fancy wear and capable of further imparting excellent touch feeling and dimensional stability thereto by blending a specific amino-modified silicone derivative with plural surfactants.

SOLUTION: This liquid detergent composition comprises (A) 0.05-5wt.% amino-modified silicon derivative represented by formula I [(I) is 100-600; (m) and (n) are each a number so as to provide (I):(m)=(100:1) to (10:1); (m):(n)=(1:10) to (10:1); R is a 1-4C alkyl, etc.; R₁ is a 1-4C alkyl; A is represented by formula II, etc., [(a) is 2-6; R₂ is H or a 1-4C alkyl; (p) is 1-6; (q) is 1-20; (r) is 0-20; R₃ is a 1-18C alkyl]; B is (CH₂)_a-O-(C₂H₄O)_x-H-(C₃H₆O)_y-R₄ [(x) is 1-20; (y) is 0-20; R₄ is a 1-10C alkyl] or R₁] and (B) 5-70wt.% surfactant containing (i) 95-75wt.% nonionic surfactant represented by formula III [R₁ is an 8-18C alkyl, etc.; R₂ is a 2-4C alkyl; R₃ is H, methyl, etc.; (n) is the number of mol of an added alkylene oxide] and (ii) 5-15wt.% nonionic surfactant, represented by formula IV (R₄ is R₁; R₅ is R₃) and having 7-10 value of hydrophile-lipophile balance(HLB) and 4wt.% content of a compound in which (n) is 0 and the number of mol of the compound having the highest content (n_{max}) satisfies formula V. The weight ratio of the ingredients A:B is (1:100) to (1:5).



$$\sum_{i=1}^{n_{max}} y_i \geq 60\%$$